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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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02/24/2004

Hiroyuki Tokimatsu

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

DICKER, DENNIS T

ART UNIT

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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/784,205	Applicant(s) TOKIMATSU, HIROYUKI	
	Examiner Dennis Dicker	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS; WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/29/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the use of legal phraseology often used in patent claims, such as "means" and "said," should be avoided (see line 1 of the abstract). Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the use of legal phraseology often used in patent claims, such as "means" and "said," should be avoided (see line 1 of the abstract). Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1-4, 19, 22-24, is rejected under 35 U.S.C. 102(b) as being anticipated by Ishiguru Hisashi (hereinafter "Hisashi '290" JP 11-127290).

As pertaining to **Claim 1**, Hisashi '290 teaches An image forming **system (i.e., Para 007, System of a plurality of printers)** comprising: communication means for interconnection (**i.e., Para 0007 , Network connecting plurality of printers**) ; and a plurality of electrophotographic image forming apparatuses (**i.e., Para 0007, Plurality of printers**) each visualizing a latent image on a latent image carrier generated based on input image data (**i.e., Para 0007, Printers can print on an latent image carrier image data received from an input device**) by means of developer and transferring the visualized image to a recording material (**i.e., Para 0007 and Para 0012, Computer is connected to printers where the image data is transferred to the printers and the visualized image is transferred to a recording material by means of a developer**), which are connected via said communication means (**i.e., Para 0021, connected by a via communication network**); the image forming system having means for storing (**i.e., Para 0035, system comprising memory for storage of data for rapid access**) usage histories (**i.e., Para 0070, usage of printed pages are queried**) of the latent image carriers of the image forming apparatuses (**i.e., Para 0070, Usage history of the Latent image carrier are received from each printing device**) and having a function of selecting image forming apparatuses outputting the image based on the carrier usage history data stored in said storing means (**i.e., Para**

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0078, depending on the remaining pages in the available printer the connection machine has a function of selecting the correct printer based on received data)

As pertaining to **Claim 2**, Hisashi '290 teaches an image forming system wherein the usage history of said latent image carrier is based on the number of transferred pages obtained with reference to an operating time (i.e., **Para 0079, the user can base the amount of operating time remaining on the amount of pages transferred which is obtained from each printer).**

As pertaining to **Claim 3**, Hisashi '290 teaches an image forming system wherein the usage history of said latent image carrier is modified according to a characteristic of deterioration through use of each latent image carrier (i.e., **Para 0070 , The usage history modified based on the remaining latent image carriers).**

As pertaining to **Claim 4**, Hisashi '290 teaches an image forming system wherein the image forming apparatuses outputting the image are selected so that the usage histories of the latent image carriers of the image forming apparatuses are approximately the same. (i.e., **Para 0069 and Para 0078, the printer with the least number of available pages is chosen based on the number of available latent image carriers so that they are all approximately the same in all available printers).**

As pertaining to **Claim 19**, Hisashi '290 teaches The image forming system wherein a part or all of the plurality of image forming apparatuses connected to each other via said communication means are of different models (i.e., **Para 0050, the Printers connected to each other are of different models)**

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As pertaining to **Claim 22**, Hisashi '290 teaches an image forming system further comprising a host device control unit for selecting the image forming apparatuses outputting the image based on one of the data (i.e., **Drawing 2 and Para 0019, host device control unit for selecting an image forming apparatus based on the data**)

As pertaining to **Claim 23**, Hisashi '290 teaches The image forming system wherein said host device control unit is incorporated in at least one of the image forming apparatuses (i.e., **Para 0059 , host device control unit incorporated in one of image forming apparatuses**)

As pertaining to **Claim 24**, Hisashi '290 teaches an image forming system according to claim 22, wherein said host device control unit is connected to said image forming apparatuses independently of the image forming apparatuses connected to each other (i.e., **Para 0059, host device control unit is connected to the master machine independent of the image forming machines**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-12 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisashi '290 in view of Hopper et al (hereinafter "Hopper '391" 7,061,391)

With respect to **Claim 5**, Hisashi '290 teaches an image forming system (i.e., **Para 007, System of a plurality of printers**) comprising: communication means for interconnection (i.e., **Para 0007 , Network connecting plurality of printers**); and a plurality of electrophotographic image forming apparatuses (i.e., **Para 0007, Plurality of printers**) each visualizing a latent image on a latent image carrier generated based on input image data by means of developer (i.e., **Para 0007, Printers can print on an latent image carrier image data received from an input device**) and transferring the visualized image to a recording material (i.e., **Para 0007 and Para 0012, Computer is connected to printers where the image data is transferred to the printers and the visualized image is transferred to a recording material by means of a developer**), which are connected via said communication means (i.e., **Para 0021, connected by a via communication network**).

Hisashi '290 does not explicitly teach the image forming system having means for storing usage histories of the developer of the image forming apparatuses and having a function of selecting image forming apparatuses outputting the image based on the developer usage history data stored in said storing means

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391. In particular, Hopper '391 teaches the use of image forming system (i.e., **Fig. 1, Image forming system**) having means for storing usage histories of the developer the image forming apparatuses (i.e., **Col 11-15 , histories of developer from each printer are stored in a computer where they can be displayed to the user**) of and having a function of selecting image forming

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apparatuses outputting the image (i.e., **Col. 6 Lines 15-22, User is prompted by a display to use the function of an input device to select an image forming apparatus with a designated printer**) based on the developer usage history data stored in said storing means (i.e., **Fig. 2 and Col. 6 Lines 15-34, The user is able to select the image forming apparatus based on the developer usage history which is displayed**).

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 6**, Hisashi '290 teaches an image forming system, wherein the usage history is based on the number of transferred pages obtained (i.e., **Para 0079, the user can base the amount of operating time remaining on the amount of pages transferred which is obtained from each printer**).

Hisashi '290 does not explicitly teach an image forming system wherein the usage history of the developer is based on the number of transferred pages with reference to an operating time of a developing device which contains the developer and supplies it to the latent image carrier, or recording materials.

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of an image

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forming system wherein the usage history of the developer is based on the number of transferred pages with reference to an operating time of a developing device(i.e., **Col 3 Lines 56-58 and Col. 2 Lines 7-16, Usage history of developer is based on number of transferred pages, where the user may choose a image forming apparatus operating time depending on available developer level**), which contains the developer and supplies it to the latent image carrier, or recording materials. (i.e., **Col. 2 Lines 20-24, on the basis of the remaining developer a determination are made to output remaining developer for an image forming apparatus onto a latent image carrier**)

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 7**, Hisashi '290 does not explicitly teach the image forming system wherein the usage history of the developer is modified according to a characteristic of deterioration through use of the developer.

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of an image forming system wherein the usage history of the developer is modified according to a characteristic of deterioration (i.e., **Col. 3 Line 60, adjustment factor**) through use of

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the developer (i.e., **Col 3 Lines 60-63, The adjustment factor modifies the usage history of the developer as it is used**).

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 8**, Hisashi '290 does not explicitly teach an image forming system wherein the image forming apparatuses outputting the image are selected so that the usage histories of the developer are approximately the same in the image forming apparatuses.

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of an image forming system wherein the image forming apparatuses outputting the image are selected so that the usage histories of the developer are approximately the same in the image forming apparatuses (i.e., **Col. 6 Lines 15-22, User is prompted by a display to use the function of an input device to select an image forming apparatus with a designated printer so that the usage histories of the developers are approximately the same**).

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290

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as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 9**, Hisashi '290 teaches An image forming system (i.e., **Para 007, System of a plurality of printers**) comprising: communication means for interconnection (i.e., **Para 0007 , Network connecting plurality of printers**); and a plurality of electrophotographic image forming apparatuses (i.e., **Para 0007, Plurality of printers**) each visualizing a latent image on a latent image carrier generated based on input image' data by means of developer (i.e., **Para 0007, Printers can print on an latent image carrier image data received from an input device**) and transferring the visualized image to a recording material (i.e., **Para 0007 and Para 0012, Computer is connected to printers where the image data is transferred to the printers and the visualized image is transferred to a recording material by means of a developer**), which are connected via said communication means (i.e., **Para 0021, connected by a via communication network**);

Hisashi '290 does not explicitly teach an image forming system having means for storing usage histories after maintenance of the image forming apparatuses and having a function of selecting image forming apparatuses outputting the image based on the usage history data

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of image forming

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system (i.e., **Fig. 1, Image forming system**) having means for storing usage histories after maintenance of the image forming apparatuses (i.e., **Col. 5 Lines 12-20, histories of developer after maintenance from each printer are stored in a computer where they can be displayed to the user**) and having a function of selecting image forming apparatuses outputting the image based on the usage history data (i.e., **Col. 6 Lines 15-22 and Fig. 2, User is prompted by a display to use the function of an input device to select an image forming apparatus with a designated printer**)

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 10**, Hisashi '290 does not explicitly teach an image forming system, wherein the usage history after maintenance is based on the number of transferred pages obtained with reference to an operating time for image formation of the image forming apparatus or recording materials

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of image forming system wherein the usage history after maintenance is based on the number of transferred pages (i.e., **Fig. 2 , the number pages remaining is an estimate of when the next maintenance is needed**) obtained with reference to an operating time for

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image formation of the image forming apparatus or recording materials (i.e., **Fig. 2, The amount of pages remaining and the number of pages used in a period of time will give the user an estimate of the operating time till the next maintenance**).

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 11**, Hisashi '290 does not explicitly teach an image forming system wherein the usage history after maintenance is modified according to a characteristic of deterioration through use of each image forming apparatus

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of image forming system wherein the usage history after maintenance is modified according to a (i.e., **Col. 3 Line 60, adjustment factor**) characteristic of deterioration through use of each image forming apparatus (i.e., **Col 3 Lines 60-63, The adjustment factor modifies the usage history after maintenance of toner in the image forming apparatus**).

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before

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the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 12**, Hisashi '290 does not explicitly teach an image forming system wherein the image forming apparatuses outputting the image are selected so that the usage histories after maintenance.

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of image forming system wherein the image forming apparatuses outputting the image are selected so that the usage histories after maintenance. (i.e., **Col. 6 Lines 15-22, User is prompted by a display to use the function of an input device to select an image forming apparatus with a designated printer so that the usage histories of the developers are approximately the same after maintenance**).

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 16**, Hisashi '290 teaches an image forming system (i.e., **Para 007, System of a plurality of printers**) comprising: communication means for interconnection (i.e., **Para 0007 , Network connecting plurality of printers**); and a plurality of electrophotographic image forming apparatuses (i.e., **Para 0007, Plurality of**

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printers) each visualizing a latent image on a latent image carrier generated based on input image data by means of developer (i.e., Para 0007, Printers can print on an latent image carrier image data received from an input device) and transferring the visualized image to a recording material (i.e., Para 0007 and Para 0012, Computer is connected to printers where the image data is transferred to the printers and the visualized image is transferred to a recording material by means of a developer), which are connected via said communication means (i.e., Para 0021, connected by a via communication network).

Hisashi '290 does not explicitly teach an image forming system having means for detecting amounts of remaining developer of the image forming apparatuses) and means for calculating a black ratio of the image data and having a function of selecting image forming apparatuses outputting the image based on the remaining developer amount data and the black ratio data.

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of image forming system (i.e., Fig. 1, Image forming system) having means for detecting amounts of remaining developer of the image forming apparatuses (i.e., Col. 5 Lines 1-7 and Fig. 2, An estimate of remaining developer of the image forming apparatuses) and means for calculating a black ratio of the image data (i.e., 142 of Fig. 5 and Fig. 7, Toner Black ratio of the image data is calculated for each print job) and having a function of selecting image forming apparatuses outputting the image based on the remaining developer amount data and the black ratio data (i.e., Col. 6 Lines 15-22,

User is prompted by a display to use the function of an input device to select an image forming apparatus with a designated printer)

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

With respect to **Claim 17**, Hisashi '290 teaches an image forming system wherein the image forming apparatuses outputting the image are selected so that the amounts of remaining developer after the image formation are approximately the same in the image forming apparatuses (i.e., **Col. 6 Lines 15-22, User is prompted by a display to use the function of an input device to select an image forming apparatus so that the consumable resources are approximately the same**).

With respect to **Claim 18**, Hisashi '290 does not explicitly teach an image forming system wherein the developer contains color particles

However, the mentioned claimed limitations are well known in the art as evidenced by Hopper '391, In particular, Hopper '391 teaches the use of image forming system wherein the developer contains color particles (i.e., **Col. 7 Lines 17-19, Developer contains color particles such as C M Y K color**)

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290

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as taught by Hopper '391 since Hopper '391 suggested in Col. 1 Lines 35-38 that such a modification would provide additional status information such as paper toner before the resource depletion level to allow for more active monitoring and maintenance of printers.

6. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisashi '290 in view of "Hopper '391" and further in view of Jamison et al (hereinafter "Jamison '773 " 2004/0080773).

With respect to **Claim 13**, Hisashi '290 teaches an image forming system (i.e., **Para 007, System of a plurality of printers**) comprising: communication means for interconnection (i.e., **Para 0007 , Network connecting plurality of printers**); and a plurality of electrophotographic image forming apparatuses (i.e., **Para 0007, Plurality of printers**) each visualizing a latent image on a latent image carrier generated based on input image data by means of developer (i.e., **Para 0007, Printers can print on an latent image carrier image data received from an input device**) and transferring the visualized image to a recording material (i.e., **Para 0007 and Para 0012, Computer is connected to printers where the image data is transferred to the printers and the visualized image is transferred to a recording material by means of a developer**), which are connected via said communication means (i.e., **Para 0021, connected by a via communication network**). Hopper '391 teaches the image forming system having means for storing information on a resource consumed by an image forming apparatus after replacement (i.e., **Col. 3 Lines 9-23 and Col. 5 Lines 12-20 , all Consumable resources can be detected after replacement**) and having a function of selecting

image forming apparatuses outputting the image (i.e., **Col. 6 Lines 15-22, User is prompted by a display to use the function of an input device to select an image forming apparatus with a designated printer**) based on the on a resource consumed obtained from the information (i.e., **Fig. 2 and Col. 6 Lines 15-34, The user is able to select the image forming apparatus based on the resource information usage history which is displayed**) and having a function of selecting image forming apparatuses outputting the image based on the consumable resource obtained from the information. (i.e., **Col. 6 Lines 15-22 and Fig. 2, User is prompted by a display to use the function of an input device to select an image forming apparatus based on the given information**)

The combination of Hisashi '290 and Hopper '391 does not explicitly teach an image forming system having means for storing information on average photographic densities of developer after replacement (i.e., **Para 0007, usage information of average print density is stored a master module memory**)

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 and Hopper '391 as taught by Jamison '773 since Jamison '773 suggested in Para 003 that such a modification would permit would save time and money.

With respect to **Claim 14**, the combination of an image forming system according to claim 13, wherein the means for storing the information on the average photographic densities includes at least means for storing usage histories of the developer (i.e., **162 of Fig. 1, Master memory module hold usage data**), means for calculating the

photographic densities during image formation successively (i.e., **Para 0007 and 10 of Fig. 1, the photographic densities are calculated by a processor**), and means for calculating the average photographic densities from the usage histories (i.e., **110 of Fig. 1, Processor calculates photographic densities from the usage histories**) and the successively calculated photographic densities (i.e., **Average photographic densities used will give user an idea of remaining pages left as taught by Hopper '391**)

With respect to **Claim 15**, Hopper '391 teaches an image forming system wherein the image forming apparatuses outputting the image are selected so that the average photographic densities are approximately the same in the image forming apparatuses. (i.e., **Col. 6 Lines 15-22, User is prompted by a display to use the function of an input device to select an image forming apparatus with a designated printer so that the usage histories of the consumable resources are approximately the same**)

7. Claim 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisashi '290 in view of Iwata et al (hereinafter "Iwata '718" 7,173,718)

With respect to **Claim 20**, the image forming system further comprising a display unit for displaying a list of the image forming apparatuses selected for outputting the image

However, the mentioned claimed limitations are well known in the art as evidenced by Iwata '718, In particular, Iwata '718 teaches the use of an image forming system (i.e., **Fig. 1, Image forming system**) further comprising a display unit for

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displaying a list of the image forming apparatuses selected for outputting the image
(i.e., **Fig. 18, List of image forming apparatuses selected for outputting an image**)

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image forming system of Hisashi '290 as taught by Iwata '718 since Iwata '718 suggested in Col. 2 Lines 21-23 that such a modification would ensure favorable resulting prints with good operatability.

With respect to **Claim 21**, Hisashi '290 teaches an image forming system further comprising an operating unit (i.e., **70 of Drawing 2, control unit**) for giving an instruction to execute the output with specifying a part or the entire image forming apparatuses displayed on said display unit. (i.e., **Drawing 2 and Para 0019, gives an instruction to execute the output and for selecting an image forming apparatus displayed**)

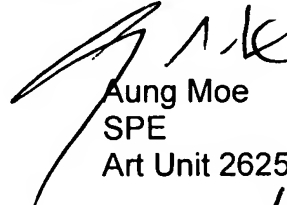
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Dicker whose telephone number is (571) 270-3140. The examiner can normally be reached on Monday -Friday 7:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Aung Moe
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